



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

647.8511
Job Sheet 181361



Part No: 647.8511

Job Qty: 80 ea

Part Name: Insert



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 7/26/18

Job Tracking No:

Due Date: 9/10/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG REV N/C IPP REV:A NEW ISSUE 16-11-09 JLM VERIFIED BY:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	80 Ea	9/10/18	9/10/18	0.00	0.00	Start Up Machining-1		
100	Doosan	80 pcs	9/10/18	9/10/18	0.00	63.75	Doosan		
110	QC	80 pcs	9/10/18	9/10/18	0.00	0.00	QC2 Machining-1		
120	QC	80 pcs	9/10/18	9/10/18	0.00	0.00	QC8 Machining-1		
122	Outsource	80 pcs	9/10/18	9/10/18			GRO002-VC	7	
123	Packaging	80 pcs	9/10/18	9/10/18	0.00	0.00	Packaging2		
124	QC	80 pcs	9/10/18	9/10/18	0.00	0.00	QC6		
130	Packaging	80 pcs	9/10/18	9/10/18	0.00	0.00	Packaging3-1		
140	QC21-SA	80 Ea	9/10/18	9/10/18	0.00	0.00	QC21		

Part Op 100 - 1-Turn as per Folio FB511 & Dwg 647.8500 Folio Rev: ____ Dwg Rev: ____ 2-Deburr
Descriptions: 122 - Issue P/O to Groupe Altech: P/O ____ -Passivate, MIL-S-5002 TYPE 6 AS PER DWG ____ Certificate of
Conformity is required
130 - LOCATION: WA001

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M303R0.625	303 Round Bar 0.625"	3.2000 ft (.04 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M303R0.625	3	23	0

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Insert	0.016Inches $\pm$ 0.005	0.021 0.011		
2	Insert	45.000Degrees $\pm$ 0.500	45.500 44.500	Angle	
3	Insert	0.020Inches $\pm$ 0.010	0.030 0.010	Radius	
4	Insert	0.210Inches + 0.005 - 0.001	0.215 0.209	Diameter	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				

5	Insert	0.300Inches $\pm$ 0.010	0.310 0.290	Diameter
6	Insert	0.350Inches $\pm$ 0.010	0.360 0.340	Diameter
7	Insert	0.060Inches $\pm$ 0.005	0.065 0.055	
8	Insert	0.374Inches $\pm$ 0.005	0.379 0.369	
9	Insert	0.560Inches + 0.000 - 0.010	0.560 0.550	
10	Insert	0.367Inches $\pm$ 0.005	0.372 0.362	
11	Insert	0.097Inches $\pm$ 0.005	0.102 0.092	Diameter
12	Insert	0.075Inches $\pm$ 0.005	0.080 0.070	Depth

Plex 7/26/18 7:30 AM Dart.lajeunesse.marie

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td style="width: 25%;">Skid-tube ☐</td> <td style="width: 25%;">Cross tube ☐</td> <td style="width: 25%;">Water Jet ☐</td> <td style="width: 25%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td></td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>			Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		Composite ☐	Supplier ☐	
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	Composite ☐	Supplier ☐																		
Date : _____ _____ _____	Part: 647.8511 Job No: 181361 Serial No/Batch: S114696 Revision: _____ Inspector: _____ Exp Date: _____ Instructions: _____ Date: 09/29/18 Dart Aerospace Ltd. 1270 Abchurch Street Mississauga, ON K6H 1K7 CANADA TEL: 1 813 632-5200 Email: sales@dartaero.com www.dartaerospace.com			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																
<table style="width: 100%;"> <tr> <td style="width: 25%;"> Environ D Doc/ Equip/To Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ </td> <td style="width: 25%;"> Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ </td> <td style="width: 25%;"> Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ </td> <td style="width: 25%;"> Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ </td> </tr> </table>				Environ D Doc/ Equip/To Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐													
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OTHER : _____																				



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041216**

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO041216
PO Date: 10/2/18
Due Date: 10/12/18
Purchase Order Revision:
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 60
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	181369	647.8512	Insert -Issue P/O to Groupe Altech: P/O _____ -Passivate, MIL-S-5002 TYPE 6 AS PER DWG - Certificate of Conformity is required	Firmed	-	10/12/18	40 pcs	0 pcs	40 pcs	\$0.57/pcs	\$22.80
2	181359	647.8510	Insert ISSUE PO: _____ SUPPLIER: GROUPE ALTECH -Passivate, MIL-S-5002 TYPE 6 AS PER DWG - Certificate of Conformity is required	Firmed	-	10/12/18	120 pcs	0 pcs	120 pcs	\$0.90/pcs	\$108.00
3	181361	647.8511	Insert -Issue P/O to Groupe Altech: P/O _____ -Passivate, MIL-S-5002 TYPE 6 AS PER DWG - Certificate of Conformity is required	Firmed	-	10/12/18	80 pcs	0 pcs	80 pcs	\$0.57/pcs	\$45.60
Grand Total:											\$176.40

Plex 10/2/18 3:38 PM dart.tsimiklis.chrisoula



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041216

Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/2/18 3:38 PM dart.tsimiklis.chrisoula



Certificat de Conformité / Certificate of Compliance



2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

013177- 1

Livré à / Ship to

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

Tel.: 613-632-5200 Fax:.

Client / Customer:

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
10-Oct-2018		Ross Montieth		✓ PO041216				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	647.8512 ✓ Rev.	647.8512 PASSIVATE MIL-S-5002 TYPE 6	PASSIVATION CH	40	40 ✓	0	0	0
2	647.8510 ✓ Rev.	647.8510 PASSIVATE ,MIL-S-5002 TYPE 6 TRY 1 PART FIRST	PASSIVATION CH	120	120 ✓	0	0	0
3	647.8511 ✓ Rev.	647.8511 PASSIVATE MIL-S-5002 TYPE 6	PASSIVATION CH	80	80 ✓	0	0	0

DAS
38
9-89

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.